



WORKPLACE SAFETY AND HEALTH IN KENTUCKY



*From The
National Institute for Occupational Safety and Health*

State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Kentucky.

The Burden of Occupational Illness and Injury in Kentucky

- In Kentucky, there are approximately 1.9 million individuals employed in the workforce.¹
- In 2000, 132 workers died as a result of workplace injuries.²
- The construction industry had the highest number of fatalities, followed second by transportation and public utilities, and third by manufacturing.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 5.8 deaths per 100,000 workers—above the national average rate of 4.5 deaths per 100,000 workers.²
- In 2000, there were 112,100 nonfatal workplace injuries and illnesses in Kentucky.³

The Cost of Occupational Injury and Illness in Kentucky

In 2000, the most recent year for which data are available, a total of \$516.4 million was paid for workers' compensation claims by Kentucky private insurers, self-insured employers, and state funds.⁴ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Kentucky

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 70 requests for HHEs in Kentucky in a variety of industrial settings, including the following example:

Lake Cumberland, Kentucky: Carbon Monoxide (CO) Exposures on Houseboats

In October 2000, NIOSH responded to a request for an HHE from the Kentucky Cabinet for Health Services to evaluate CO concentrations from the operation of houseboats on Lake Cumberland. Previous investigations by NIOSH and several other agencies of houseboat-related CO poisonings and deaths of boaters and boat maintenance employees at Lake Powell, Arizona, had shown that CO concentrations can be very high around the swim platform and in the open space under the platform. The investigation in Kentucky reaffirmed concerns for CO exposure on houseboats. Recommendations to the Cabinet for Health Services included: warn potentially exposed individuals of this hazard; protect workers on houseboats-- the use of a high-volume fan may be effective; provide training on CO hazards in boating to marina personnel, emergency medical service providers, and hospital emergency department staff; provide information on CO hazards during the boat check-out training for boat renters; and require permits for workers entering the area under the swim deck, defined as confined space by NIOSH and the U.S. Occupational Safety and Health Administration.

Fatality Assessment and Control Evaluation (FACE) Investigations

NIOSH developed the FACE program to identify work situations with a high risk of fatality and to formulate and disseminate prevention strategies. In Kentucky, FACE is conducted by the Department for Public Health under a cooperative agreement with NIOSH. Since 1995, there have been 75 FACE investigations in Kentucky, including the following example:

Kentucky: Logger Fatally Injured by Falling Tree

In December 2000, a 73-year-old male self-employed logger was killed when he was struck by a falling tree. His son was operating a skidder to pull away the tree that had been cut but was still standing, supported by another tree. As the tree fell to the ground, the father, who was watching, was struck by its branches. In order to prevent similar instances from occurring, FACE investigators recommended that loggers: complete training on logging standards and safety procedures; plan an escape path when felling a tree; complete a hazard assessment of the site before beginning any work; and wear appropriate personal protective equipment.

Fire Fighter Fatality Investigation and Prevention Program

The purpose of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to determine factors that cause or contribute to fire fighter deaths suffered in the line of duty. NIOSH uses data from these investigations to generate fatality investigation reports and a database of case results that guides the development of prevention and intervention activities. Since 1997, there have been four fire fighter fatality investigations in Kentucky.

Building State Capacity

State-Based Surveillance

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Kentucky Department for Public Health. Through ABLES, the agency's staff track and respond to cases of excessive

lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility. In addition, NIOSH funds the Sentinel Event Notification System for Occupational Risk (SENSOR), through which the state's Public Health Department staff track and develop interventions for specific occupational diseases and injuries such as burns.

Southeast Center for Agricultural Health and Injury Prevention

NIOSH funds the Southeast Center, one of ten NIOSH Centers for Agricultural Disease and Injury Research, Education, and Prevention nationwide. The Center serves states in the region through activities that focus on applied agricultural health research, education and training in agricultural health, and the design and conduct of prevention and intervention programs in agricultural health and safety.

Training Programs

NIOSH funds a training program at Murray State University that offers undergraduate and graduate degrees in occupational safety and health. In fiscal year 2001, 284 students were enrolled and 94 were graduated; 29 short courses were conducted for 602 trainees. At Western Kentucky University, NIOSH funds a program providing undergraduate training in occupational safety and health. In fiscal year 2001, 16 students were enrolled and three students were graduated.

Extramural Programs Funded by NIOSH

The following are examples of recent research contracts, research grants, training grants, or cooperative agreements funded by NIOSH in the state of Kentucky.

Sustained Work Indicators of Older Farmers

Farmers suffer high rates of occupational injury and mortality but rarely retire. NIOSH funds the University of Kentucky to develop health and exposure profiles of older male and female farmers in Kentucky and South Carolina, with a special emphasis on African-American farmers. The social and economic factors will be identified that influence the work practices and health of older farmers. Findings will be used to design health and safety programs for aging farmers.

Children's Injuries on Kentucky Beef Cattle Farms

Each year, an estimated 100 children die and 100,000 are injured on farms. Despite these data, few analytic studies have focused on children's agricultural injuries. With support from NIOSH, researchers at the University of Kentucky will characterize the work tasks and exposures of children living and working on family farms in Kentucky. The study will focus on beef cattle farms, where an estimated 41% of these children live and work, incurring a high risk of injury. The study will help formulate age appropriate guidelines for children's work and improve cattle handling procedures, equipment design, and confinement facilities on beef cattle farms.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

⁴National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.